UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/788,813	02/27/2004	David W. Proctor	MSFT-2872/306077.02	7349

41505 7590 08/20/2008

WOODCOCK WASHBURN LLP (MICROSOFT CORPORATION)
CIRA CENTRE, 12TH FLOOR
2929 ARCH STREET
PHILADELPHIA, PA 19104-2891

EXAMINER	
KUMAR, ANIL N	

ART UNIT	PAPER NUMBER
2174	

MAIL DATE	DELIVERY MODE
08/20/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/788,813	PROCTOR ET AL.	
	Examiner	Art Unit	
	ANIL N. KUMAR	2174	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *05 May 2008*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-41* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-41* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. This action is in response to the RCE filed on May 5th, 2008. Claims (1-41) are pending and have been considered below.

Claim Rejections - 35 USC § 101

2. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

3. Claims 25 and 38-41are rejected under 35 U.S.C. because the claimed invention is directed to non-statutory subject matter. The language of the claims raise a question as to whether the claims are directed merely to abstract ideas that are not tied to a technological art, environment, or machine which would result in a practical application producing a concrete, useful, and tangible result to form the basis of statutory subject matter under 35 U.S.C. 101. Claims considered to be Non-functional Descriptive Material are not statutory even if in combination with a physical medium. see **MPEP § 2106**

Regarding claim 25, 38 and 39, the phrase “at least one signal” is intended to cover a signal as described in the specifications “Modulated Data signal” (paragraph [0021]). Claiming a signal per se is considered non-statutory subject matter because a signal is a form of energy.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zadesky et al. ("Zadesky", US 2003/0076306 A1) in view of Ludtke (US 2001/0043198 A1).

Claim 1: Zadesky teach, a user interface control including, comprising:

- a touchpad control having a touch-sensitive surface comprising the shape of an arc (The shape of the touch pad 110 may also be widely varied, paragraph [0044] and Fig. 2),
- the arc divided into a first region and a second region by a dividing boundary (region 110 and region 112 in Fig. 2),
- the first region associated with a first function having a plurality of different degrees of said first function (The touchpad/display system 200 via the touch pad 202 is configured to transform a swirling or whirling motion 206 of an object such as a finger (as shown in FIG. 3A) into translational or linear motion 208 on the display screen 204 –different degrees of motion-, paragraph 0051] and Fig. 4),

- each degree of the first function associated with a corresponding relative distance within the first region from the dividing boundary (the more rapid swirling of the finger enables effective acceleration of the transitioning of the list of media items 211, paragraph [0054]),
- wherein the touchpad control is configured to detect a touch within the first region and to select the first function and an associated degree of the first function (control assembly 212, paragraph [0053-54] and Fig. 4),

but does not disclose

- corresponding to the relative distance of the touch from the dividing boundary within the first region.

However, Ludtke teach, a method and system for selecting a value from a range of values includes selecting a field having a value, selecting a location of a graphic to choose a value from the range (Abstract) and further teach, the candidate value would be chosen so that the position of the candidate value within range 72 is proportional to the distance of pointer 12 from ends 30, paragraph [0057]). Therefore, it would have been obvious to an artisan at the time of the invention to combine Ludtke's teaching with Zadesky, to include the relative distance feature in Zadesky, in order to make the features that depend on degrees of functionality, easy and efficient to use in a touchpad environment.

Claim 2: Zadesky teach, wherein the arc is of substantially uniform width (Fig. 2).

Claim 3: Zadesky teach, wherein the touchpad control is substantially in the shape of a quarter circle (The shape of the touch pad 110 may also be widely varied, paragraph [0044] and Fig. 2).

Claim 4: Zadesky teach, wherein the arc is at least one of (A) thinner than at least one end of the arc at the middle of the arc and (B) thicker than at least one end of the arc at the middle of the arc and the arc includes at least one of (C) a curved end and (D) a substantially straight end (The shape of the touch pad 110 may also be widely varied, paragraph [0044] and Fig. 2).

Claim 5: Zadesky teach, wherein the dividing boundary between said first region and said second region is substantially about the middle of the arc (The position of the buttons 112 relative to the touch pad 110 may be widely varied, paragraph [0045]).

Claim 6 is similar in scope claim 1, and therefore rejected under similar rationale. Furthermore, Zadesky teach, second region (112 in Fig. 2)

Claim 7: Zadesky teach, wherein said first set of functionality provides a set of functionality opposite to said second set of functionality (see opposite directional buttons in Fig. 2).

Claim 8: Zadesky teach, wherein at least one of said first function and second function includes varying degrees of function for at least one of Escape, Start, Options, More, Less OK, Back, Forward, Play, Pause, Up, Down, Fast Forward, Reverse, Skip Forward, Skip Backwards, Menu, Left, Right, Mute, Volume Up, Volume Down, Raise Light and Lower Light functionalities (By way of example, the plurality of buttons 112 may consist of a menu button, play/stop button, forward seek button and a reverse seek button, and the like, paragraph [0045]).

Claim 9: Ludtke further teach, wherein the degree of functionality is determined based upon a distance of an input in said first region of control from the centerline of the touch pad arc (the candidate value would be chosen so that the position of the candidate value within range 72 is proportional to the distance of pointer 12 from ends 30 –dividing boundary-, paragraph [0057]).

Claim 10: Zadesky teach, wherein the degree of functionality is determined based upon a distance of an input in said first region of control from the centerline of the touch pad arc; is determined based upon at least one of (A) a velocity and (B) an acceleration associated with an, input to the user interface control calculated from recent historical interaction with the user interface control (since the list of media items can be rather lengthy, the invention provides the ability for the user to rapidly –inherent that the velocity and/or acceleration is

determined- traverse (or scroll) through the list of media items, paragraph [0040]).

Claim 11: Zadesky teach, wherein said arc is substantially in the form of a curved cavity in the surface of a device including the user interface control (Fig. 2).

Claim12: Zadesky teach, implemental in any of a portable media player, a remote control for a computing device, a computing device, a swappable component of a computing device and a component for augmenting a computing device (There exist today many styles of input devices for performing operations in a consumer electronic device, paragraph [0007]).

Claim 13 is similar in scope claim 1, and therefore rejected under similar rationale. Furthermore, Zadesky teach, that the touch pad may be widely varied (paragraph [0036]).

Claim 14 is similar in scope claim 2, and therefore rejected under similar rationale.

Claim 15 is similar in scope claim 3, and therefore rejected under similar rationale.

Claim 16 is similar in scope claim 4, and therefore rejected under similar rationale.

Claim 17 is similar in scope claim 5, and therefore rejected under similar rationale.

Claim 18 is similar in scope claim 6, and therefore rejected under similar rationale.

Claim 19 is similar in scope claim 7, and therefore rejected under similar rationale.

Claim 20 is similar in scope claim 8, and therefore rejected under similar rationale.

Claim 21 is similar in scope claim 9, and therefore rejected under similar rationale.

Claim 22 is similar in scope claim 10, and therefore rejected under similar rationale.

Claim 23 is similar in scope claim 12, and therefore rejected under similar rationale.

Claim 24 is similar in scope claim 1, and therefore rejected under similar rationale. Furthermore, Zadesky teach, receiving a touch input, determining the location and outputting a function call (touchpad/display system 200, paragraph [0051]) and Fig. 4).

Claim 25: Zadesky teach, performing the first function functionality to the corresponding degree in accordance with said at least one of at least one function call and at least one signal (The touch pad 110 is configured to provide one or more control functions, paragraph [0036]).

Claim 26: Ludtke further teach, wherein said determining includes determining a distance of the touch input within the first region from the dividing boundary of the touchpad control (the candidate value would be chosen so that the position of the candidate value within range 72 is proportional to the distance of pointer 12 from ends 30 –dividing boundary-, paragraph [0057]).

Claim 27 is similar in scope claim 10, and therefore rejected under similar rationale.

Claim 28 is similar in scope claim 5, and therefore rejected under similar rationale.

Claim 29 is similar in combination to claims 6 and 26, and therefore rejected under similar rationale.

Claim 30 is similar in scope claim 7, and therefore rejected under similar rationale.

Claim 31 is similar in scope claim 8, and therefore rejected under similar rationale.

Claim 32 is similar in scope claim 24, and therefore rejected under similar rationale. Furthermore, Zadesky teach, computer readable medium (paragraph [0066]).

Claim 33 is similar in scope claim 24, and therefore rejected under similar rationale. Furthermore, Zadesky teach, processor 214 is coupled between the control assembly 212 and the display screen 204 (paragraph [0054]).

Claim 34 is similar in scope claim 24, and therefore rejected under similar rationale. Furthermore, Zadesky teach, a detection component (control assembly

212) and an output component (processor 214 is coupled to the display screen 204, paragraph [0054] and Fig. 4).

Claim 35 is similar in combination to claims 1 and 13, and therefore rejected under similar rationale.

Claim 36 is similar in scope claim 34, and therefore rejected under similar rationale. Zadesky teach, a processing subunit (processor 214, Fig. 4).

Claim 37 is similar in scope claim 35, and therefore rejected under similar rationale.

Claim 38 is similar in combination to claims 1 and 13, and therefore rejected under similar rationale. . Zadesky teach, a computing device (processor 214, Fig. 4).

Claim 39 is similar in scope claim 9, and therefore rejected under similar rationale.

Claim 40 is similar in scope claim 26, and therefore rejected under similar rationale.

Claim 41 is similar in scope claim 10, and therefore rejected under similar rationale.

Response to Arguments

5. Applicant's arguments filed May 5th, 2008 have been fully considered but they were found not persuasive.

A. Applicant argues, "because they do not teach or suggest all of the recited claim language, Combs, Perttunen, and Westerman cannot possibly be combined to form the recited combination of claim 1". The Examiner maintains the rejection and points out that this is moot in view of new rejection.

B. Applicant argues, for claim 34, "None of Combs, Perttunen, or Westerman teach or suggest even one region associated with a function having locations associated with differing degrees of a single function, let alone two such regions". The Examiner maintains the rejection and points out that this is moot in view of new rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anil N. Kumar whose telephone number is (571) 270-1693. The examiner can normally be reached on Wednesdays and alternate Mon-Tue and Thu-Fri EST (Alternate Mon-Tue and Thu-Fri off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor Stephen Hong can be reached on (571) 272-4124. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

ANK

/Stephen S. Hong/

Supervisory Patent

Examiner, Art Unit 2178

8/14/2008